THOMSON MULTI MEDIA

Brandt FERGUSON NORDMENDE SABA TELEFUNKEN THOMSON

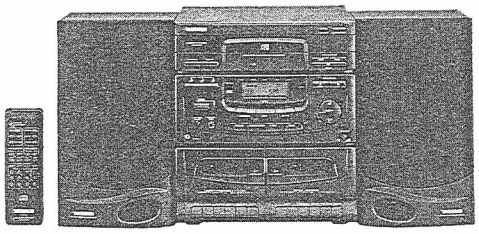
AUDIO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

THOMSON VTCD 900

Version (PC*) : C

*PC : This version code is indicated either in the battery compartment or on the back of the set - Ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC : Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - Il codice della versione è indicato nello scompartimento delle batterie o sul retro dell'apparecchio - El código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.



Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Caracteristicas del aparato

Type of set : **Type d'appareil :** **Geräteart :** **Tipo d'apparecchio :** **Tipo de aparato :**	Cassette radio recorder / compact disc Combiné radio cassette / CD CD-Radio Cassetten Portable Insieme radio cassette / CD Radio cassette / CD	↔ 280 mm ↕ 305 mm ↗ 295 mm	
Power supply : **Alimentation :** **Stromversorgung :** **Alimentazione :** **Alimentación :**	230V +10/-15% ~ 50 Hz	**Nominal output power :** **Puissance nominale de sortie :** **Nennausgangsleistung :** **potenza nominale di uscita :** **Potencia nominal de salida :**	2 x 15 W (Rms) 2 x 30 W (Music.)
FM -MF : **MW - PO :** **LW - GO :**	87,5 - 108 MHz 525 - 1620 kHz 148 - 284 kHz	**Sensitivity :** **Sensibilité :** **FM -MF :** **Empfindlichkeit :** **MW - PO :** **Sensibilità :** **LW - GO :** **Sensibilidad :**	8 µV (S/N = 26 dB) 1000 µV/m (S/N = 20 dB) 2500 µV/m (S/N = 20 dB)
Frequency response : **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :**	150 Hz - 6 kHz (-5 dB)	**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** **Rapporto segnale / disturbo :** **Relación señal / ruido :**	42/44 dB
Wow and fluttter : **Fluctuations :** **Gleichlauf :** **Fluttuazioni :** **Fluctuaciones :**	0,5 %	→	4,75 cm/s
		<< ▶▶ >> << ◀◀ >>	C60 : 170 s
Disc rotation speed : **Vitesse de rotation du disque :** **CD-Drehgeschwindigkeit :** **Velocità di rotazione del disco :** **Velocidad de rotación del disco :**	200 ➡ 500 tr/m	**Frequency response :** **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :**	20 Hz - 20kHz (±2 dB)
Dynamic range : **Gamme dynamique :** **Dynamikumfang :** **Dinamica :** **Dinámica :**	82 dB	**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** **Rapporto segnale / disturbo :** **Relación señal / ruido :**	85 dB

WARNING : *Before servicing this set read the safety recommendations.*
ATTENTION : *Avant toute intervention sur cet appareil, lire les recommandations de sécurité.*
ACHTUNG : *Bei jedem Eingriff im Gerät, die Sicherheitsvorschriften beachten.*
ATTENZIONE : *Prima di intervenire sull'apparecchio, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 350 357 80 - 0597 / 4 M - CRKD2321 Print.

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⚠ Indicates critical safety components, and identical components should be used for replacement. Only then can the operational safety be garanteed.

Le remplacement des éléments de sécurité (repérés avec le symbole ⚠) par des composants non homologués selon la Norme CEI 65 entraine la non-conformité de l'appareil. Dans ce cas, la responsabilité du fabricant n'est plus engagée.

Wenn Sicherheitsteile (mit dem Symbol ⚠ gekennzeichnet) durch nicht normengerechte Teile ersetzt werden, erlischt die Haftung des Herstellers.

La sostituzione degli elementi di sicurezza (marcati con il segno ⚠) con componenenti non omologati secondo la norma CEI 65 comporta la non conformitá dell'apparecchio. In tal caso è "esclusa la responsabilità " del costruttore.

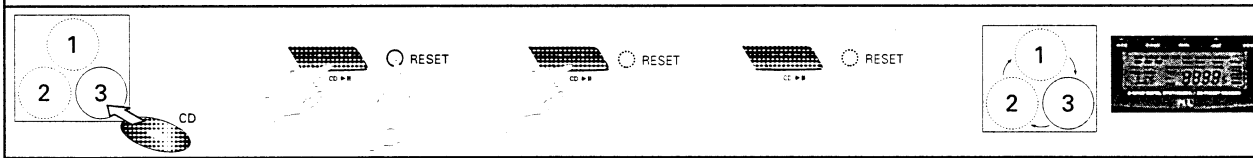
La subtitución de elementos de seguridad (marcados con el simbolo ⚠) por componentes no homologados segun la norma CEI 65, provoca la no conformidad del aparato. En ese caso, el fabricante cesa de ser responsable.

PLL ADJUSTMENTS - REGLAGES DU PLL - PLL EINSTELLUNGEN - REGOLAZIONE DI PLL - AJUSTES DEL PLL

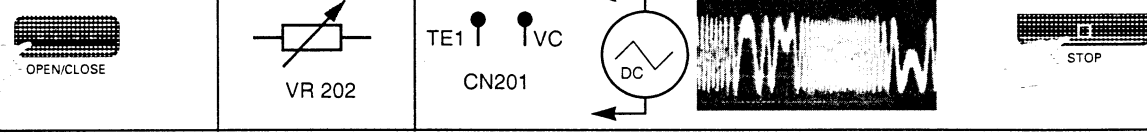
	AM			FM	
T 003	TP005	V = 1,0 V ± 0,2 V	**L 001**	TP005	V = 7,5V ± 0,2V
T 007	TP005	V = 1,0 V ± 0,2 V			

ADJUSTMENTS - REGLAGES - ABGLEICH - REGOLAZIONE - AJUSTES

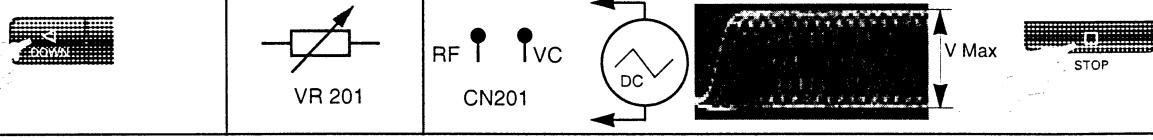
CD TEST MODE



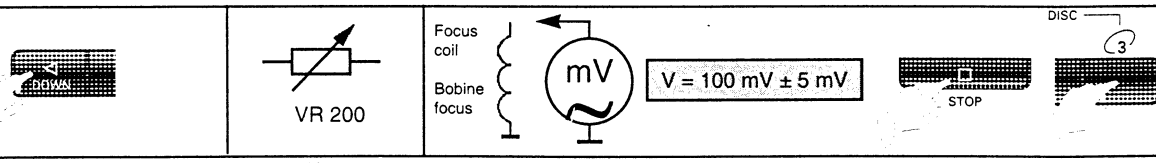
TRACKING OFFSET



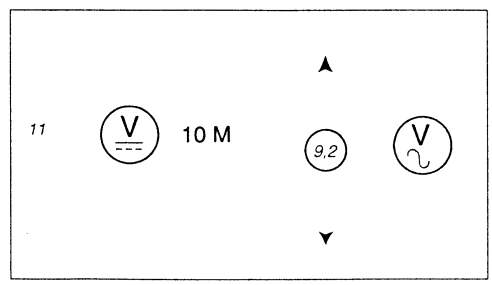
FOCUS BIAS



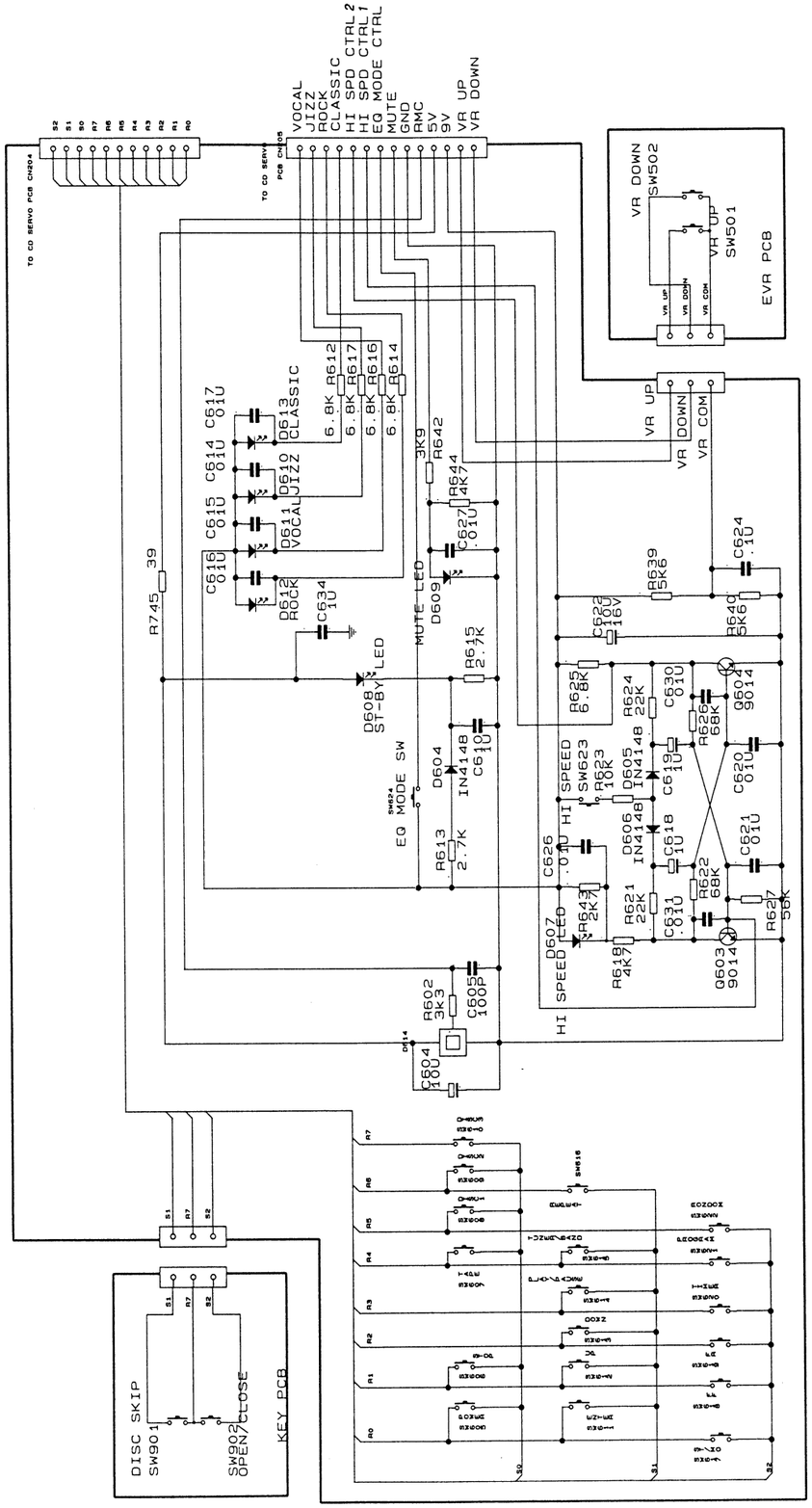
TRACKING GAIN



Pour les réglages utiliser le disque test **925 TX 0977**



FUNCTION CONTROL SCHEMATIC DIAGRAM - SCHEMA COMMANDES FONCTIONS - SCHALTBILD FUNKTIONSBEDIENTEIL - SCHEMA COMANDI FUNZIONI - ESQUEMA DE MANDOS FUNCIONES



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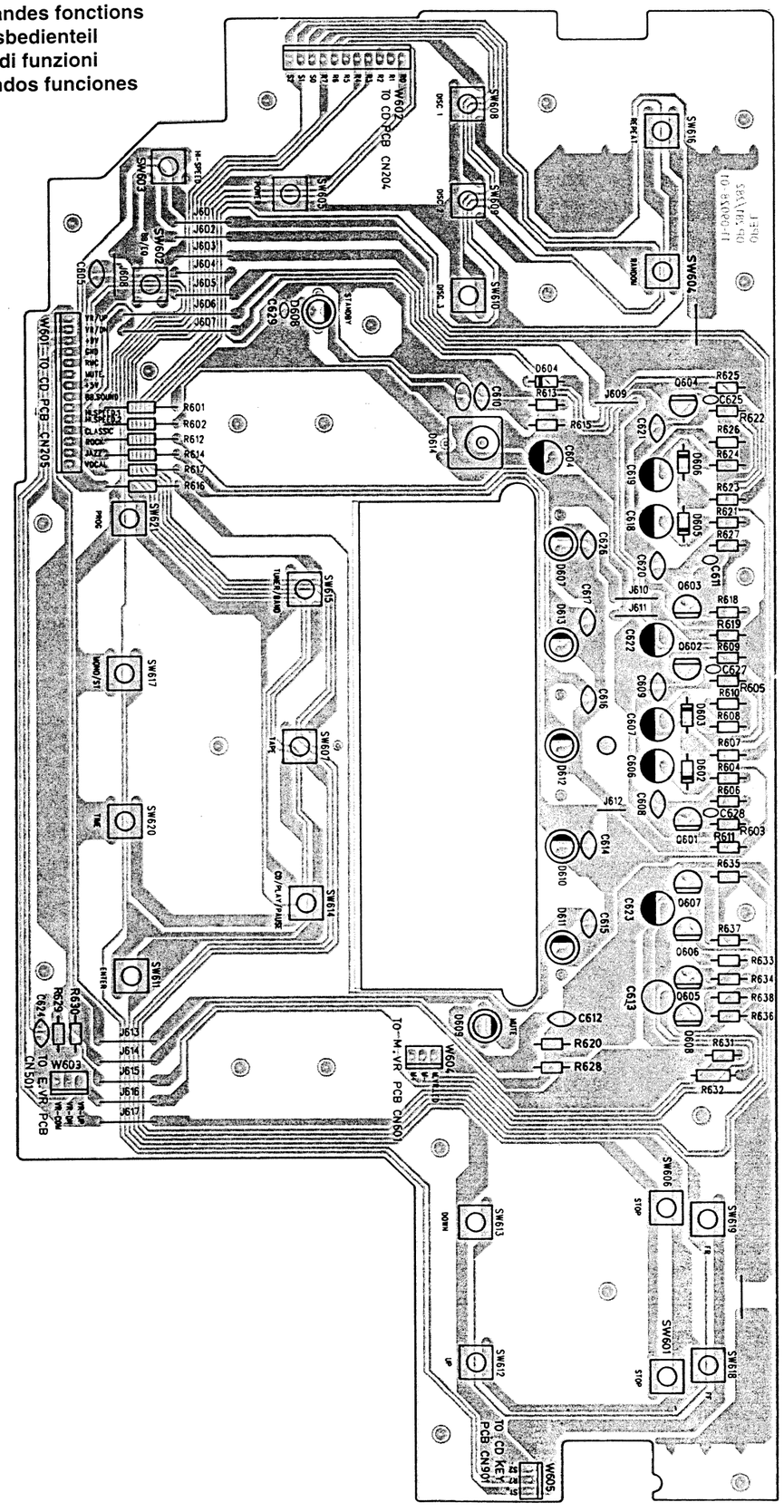
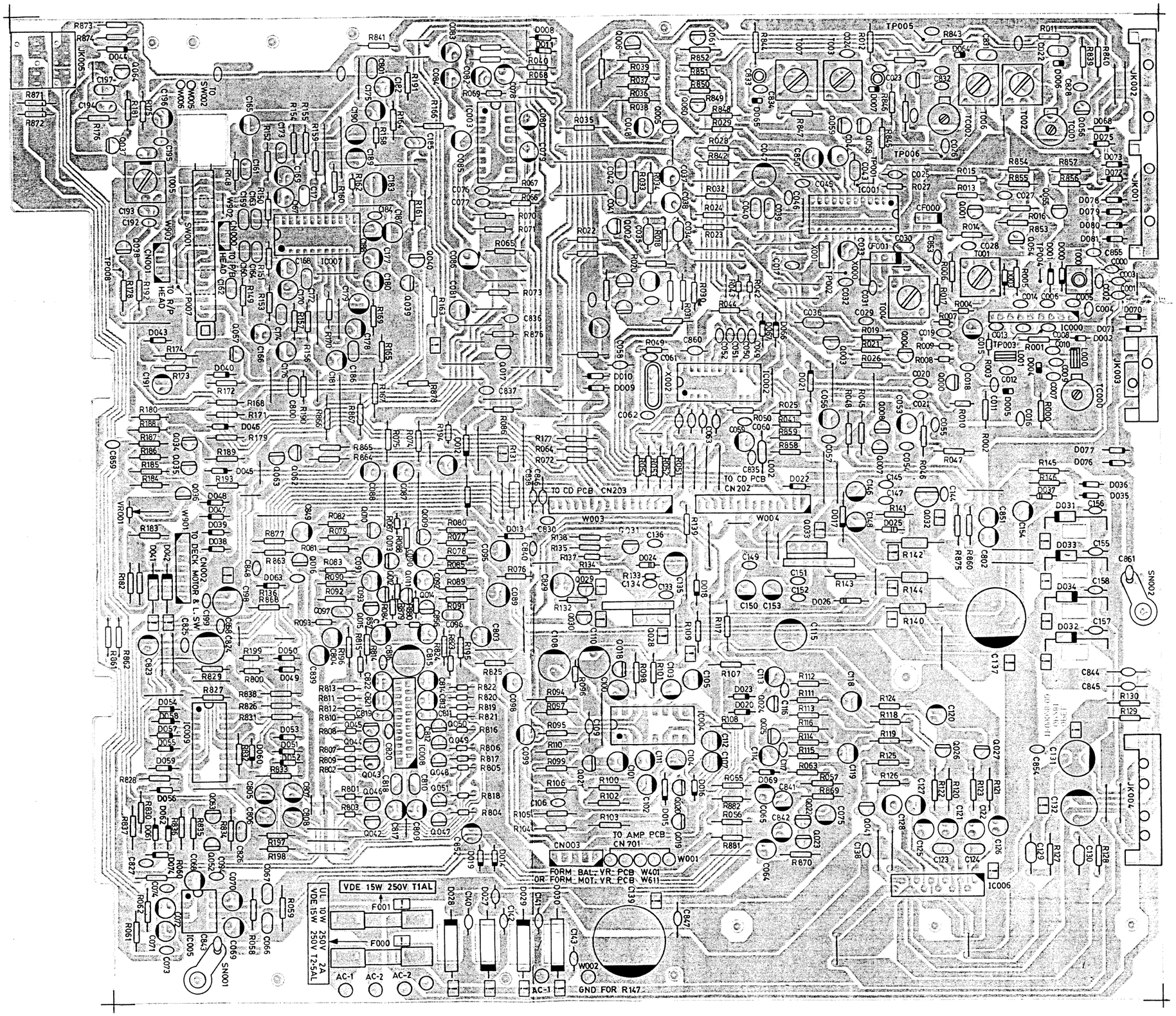
Function control P.C.B.
Platine commandes fonctions
Ltpl. Funktionsbedienteil
Piastra comandi funzioni
Platina de mandos funciones



Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal


TO CD PCB CN203
TO CD PCB CN202
TO AMP PCB CN701
TO DECK MOTOR & L.SW CN002
TO R/P HEAD
TO P/B HEAD
VDE 15W 250V T1AL
UL 10W 250V 2A
VDE 15W 250V T2.5AL
FORM BAL. VR PCB W401 W611
OR FORM MOT. VR PCB
GND FOR R147

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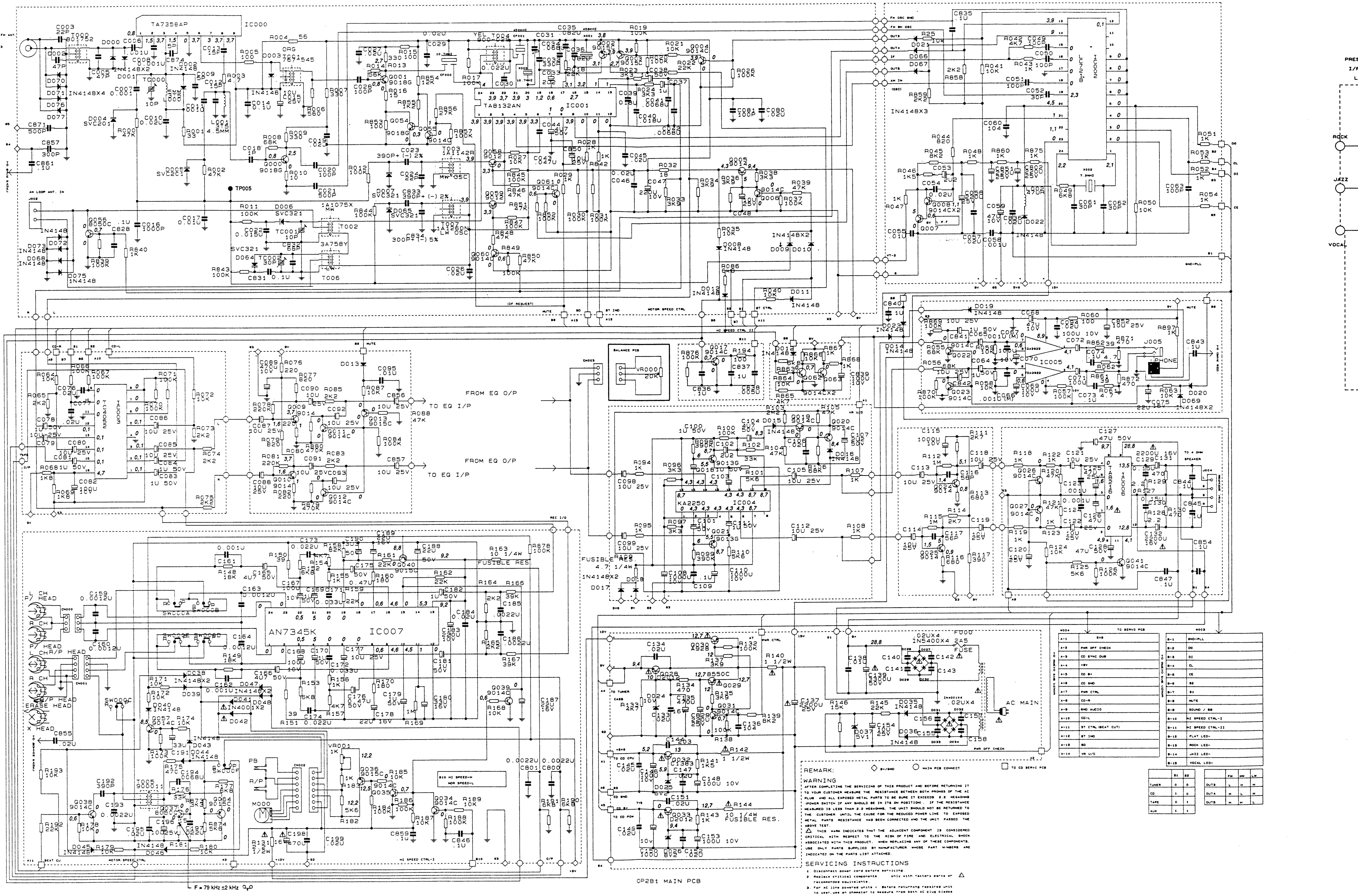
MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL



REMARK: ◇ B+/GND ○ MAIN PCB CONNECT □ TO CD SERVO PCB

WARNING

AFTER COMPLETING THE SERVICING OF THIS PRODUCT AND BEFORE RETURNING IT TO YOUR CUSTOMER MEASURE THE RESISTANCE BETWEEN BOTH PRONGS OF THE AC PLUG AND ALL EXPOSED METAL PARTS TO BE SURE IT EXCEEDS 2.2 MEGAOHMS (POWER SWITCH IF ANY SHOULD BE IN ITS ON POSITION). IF THE RESISTANCE MEASURED IS LESS THAN 2.2 MEGAOHMS, THE UNIT SHOULD NOT BE RETURNED TO THE CUSTOMER UNTIL THE CAUSE FOR THE REDUCED POWER LINE TO EXPOSED METAL PARTS RESISTANCE HAS BEEN CORRECTED AND THE UNIT PASSED THE ABOVE TEST.

⚠ THIS MARK INDICATES THAT THE ADJACENT COMPONENT IS CONSIDERED CRITICAL WITH RESPECT TO THE RISK OF FIRE AND ELECTRICAL SHOCK ASSOCIATED WITH THIS PRODUCT. WHEN REPLACING ANY OF THESE COMPONENTS, USE ONLY PARTS SUPPLIED BY MANUFACTURER WHOSE PART NUMBERS ARE INDICATED ON THE PARTS LIST ATTACHED.

SERVICING INSTRUCTIONS

1. Disconnect power cord before servicing.
2. Replace critical components ⚠ only with factory parts or recommended equivalents.
3. For AC line powered units - Before returning repaired unit to user, use an ohmmeter to measure from both AC plug blades to all exposed metallic parts. The resistance should be more than 100,000 ohms.

W004 — TO SERVO PCB

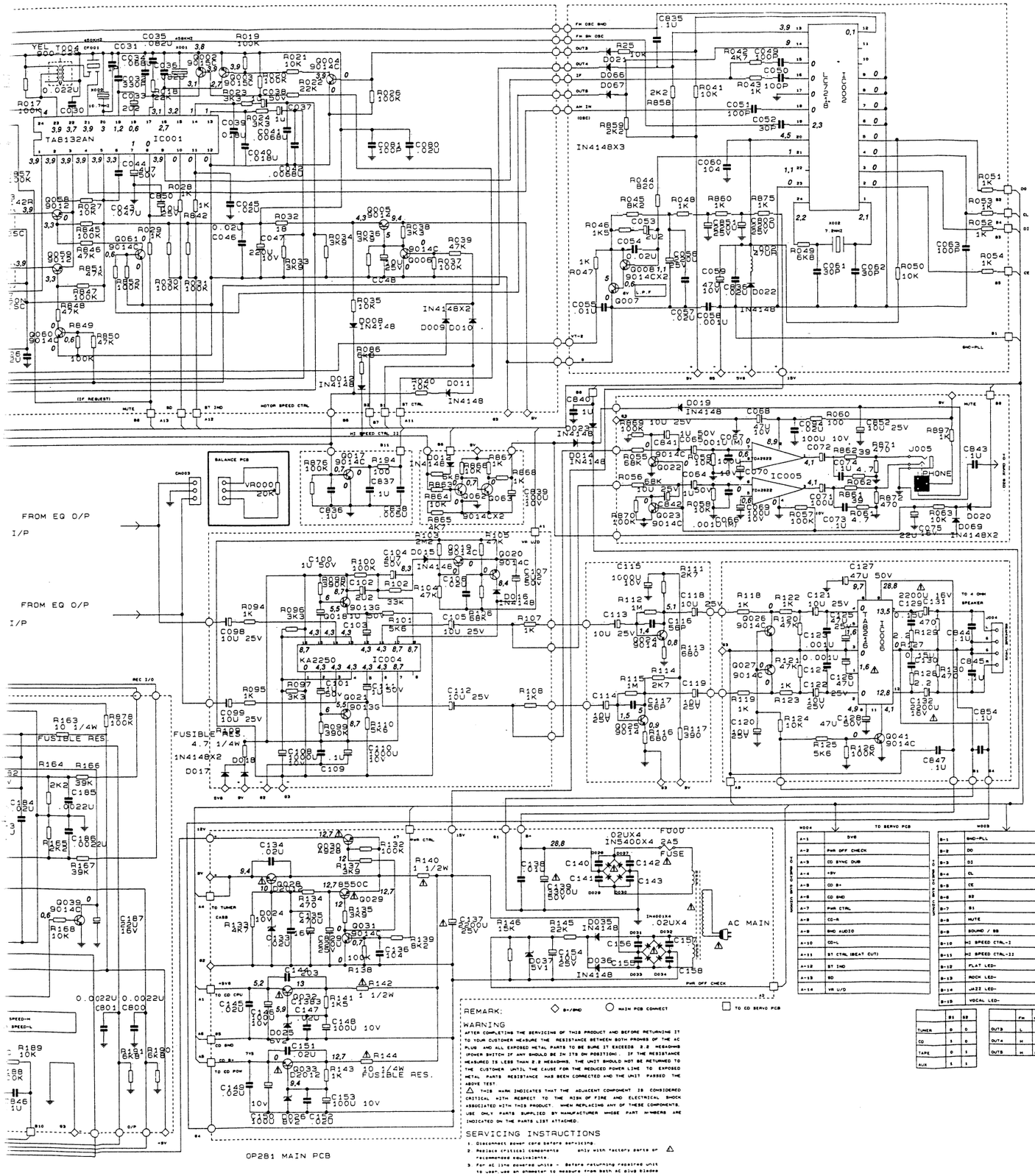
W004	
A-1	5V6
A-2	PWR OFF CHECK
A-3	CD SYNC DUB
A-4	+9V
A-5	CD B+
A-6	CD GND
A-7	PWR CTRL
A-8	CD-R
A-9	GND AUDIO
A-10	CD-L
A-11	ST CTRL (BEAT CUT)
A-12	ST IND
A-13	SD
A-14	VR U/D

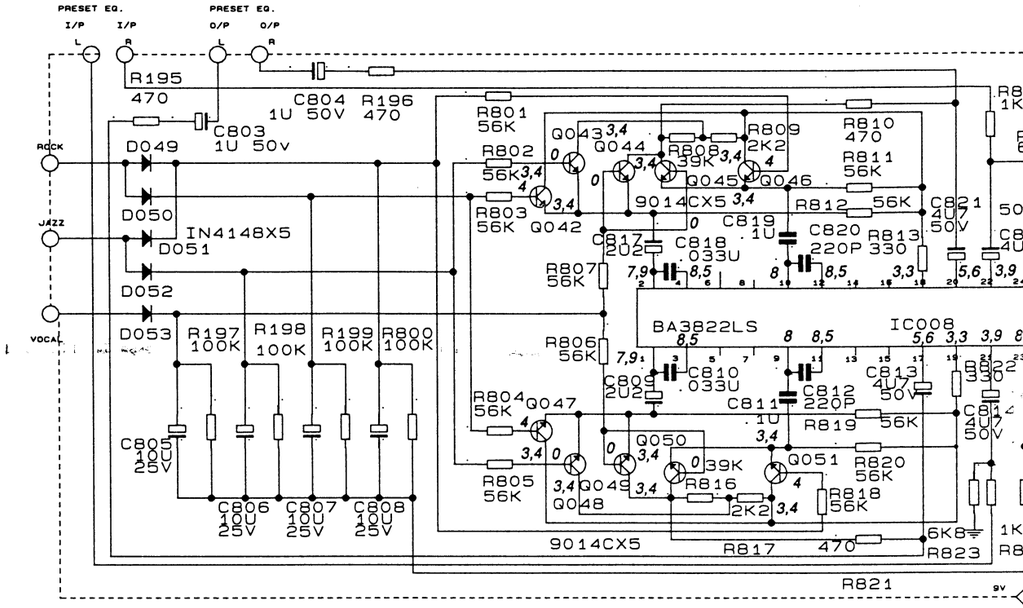
W003	
B-1	GND-PLL
B-2	DO
B-3	DI
B-4	CL
B-5	CE
B-6	S2
B-7	S1
B-8	MUTE
B-9	SOUND / BB
B-10	HI SPEED CTRL-I
B-11	HI SPEED CTRL-II
B-12	FLAT LED-
B-13	ROCK LED-
B-14	JAZZ LED-
B-15	VOCAL LED-

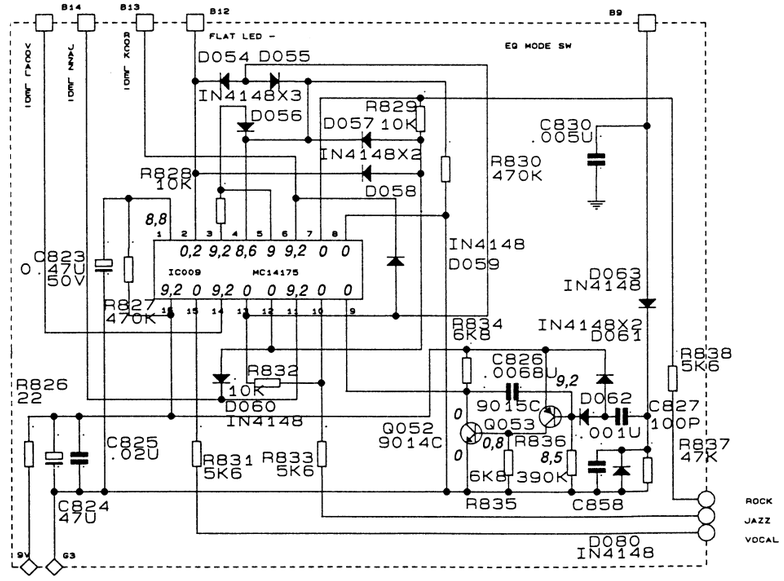
	S1	S2
TUNER	0	0
CD	1	0
TAPE	0	1
AUX	1	1

	FM	MW	LW
OUT3	L	H	H
OUT4	H	L	H
OUT5	H	H	L

ALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE- ESQUEMA DE LA PLATINA PRINCIPAL

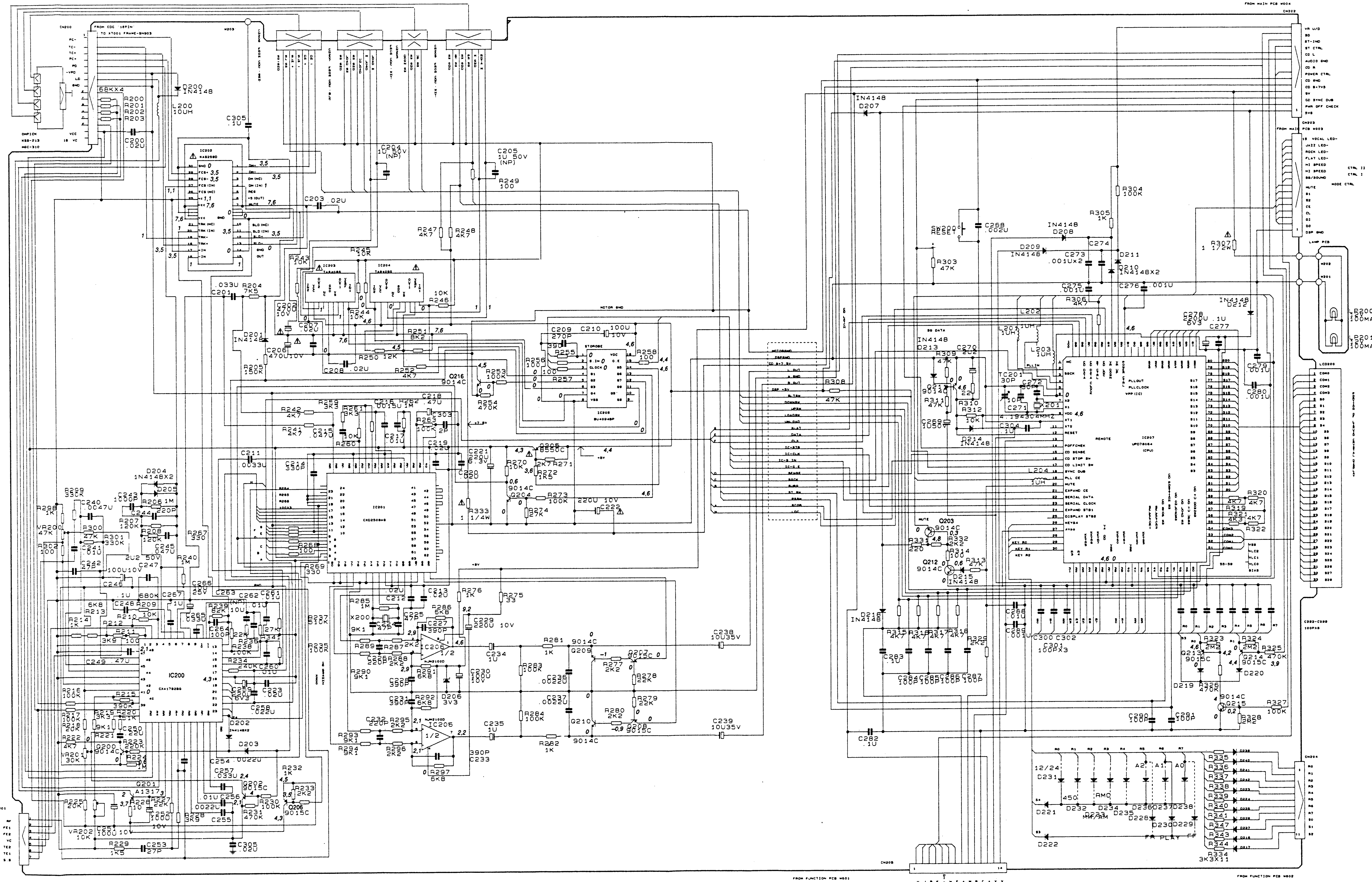






DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL

Digital processing
Platine traitement
Ltpl. Digitalverarbe
Piastra elaborazion
Platina tratamiento



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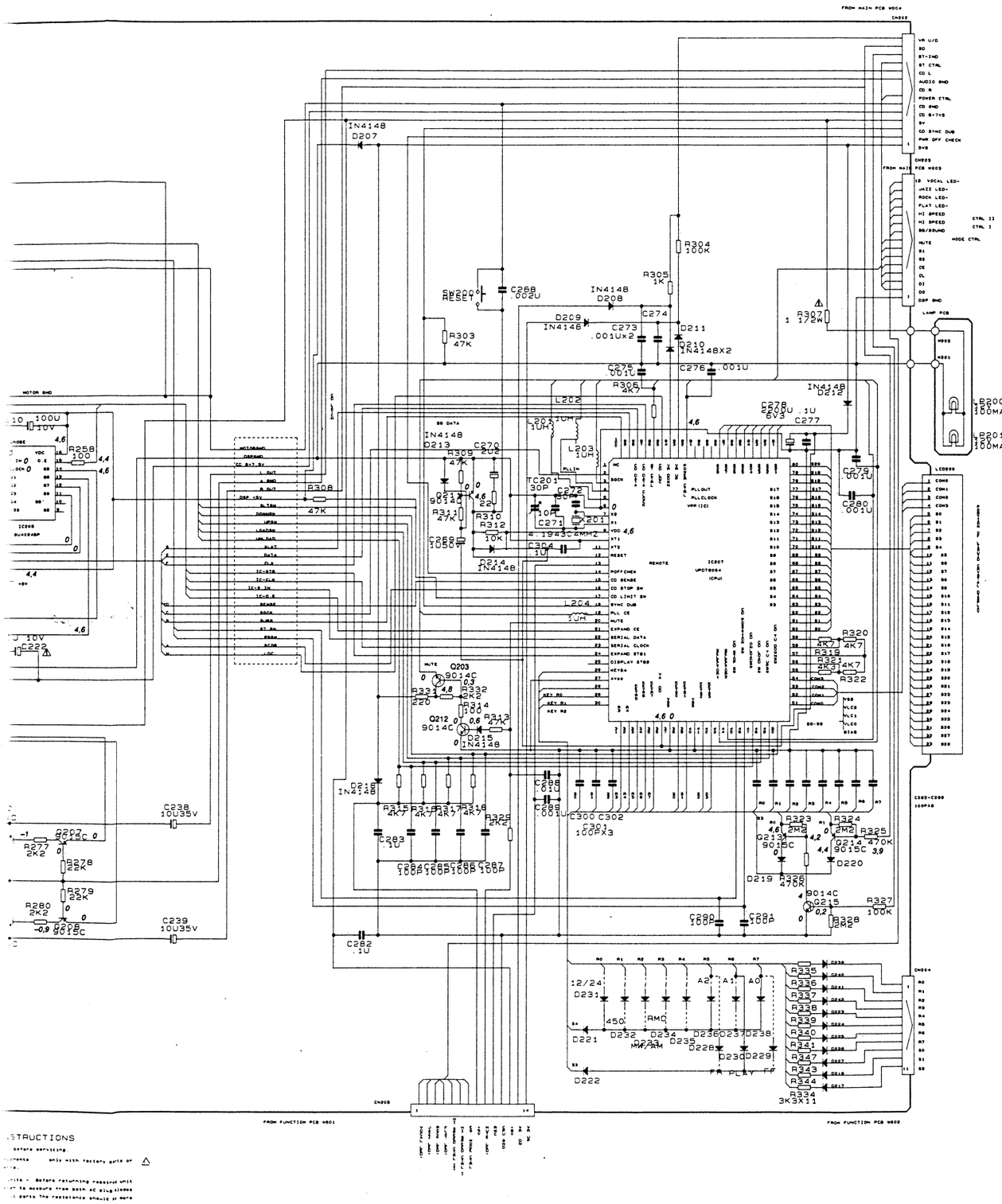
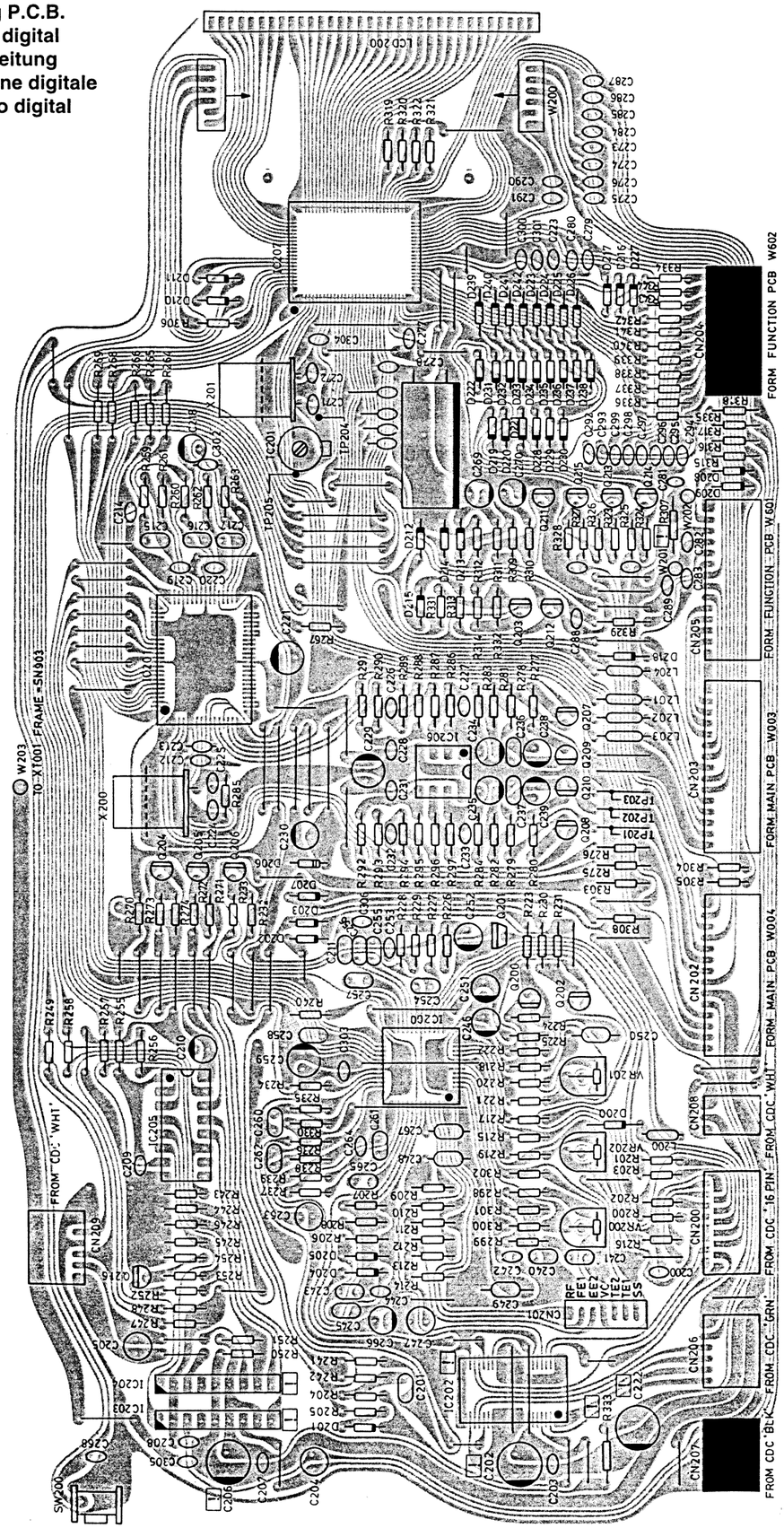
GITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL



Digital processing P.C.B.
Platine traitement digital
Ltpl. Digitalverarbeitung
Piastra elaborazione digitale
Platina tratamiento digital



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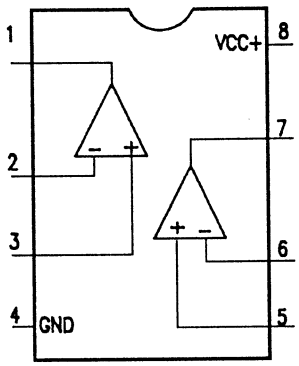
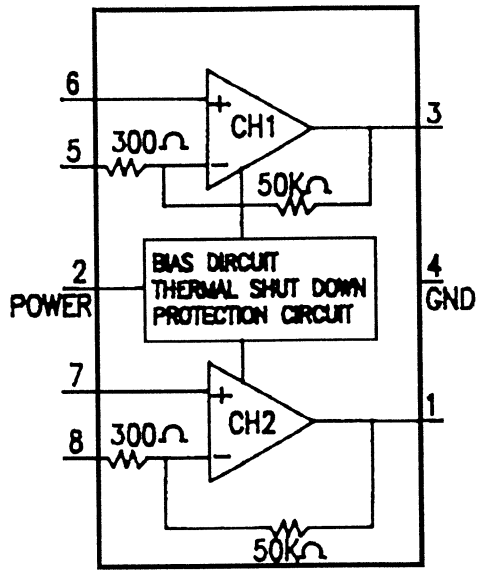
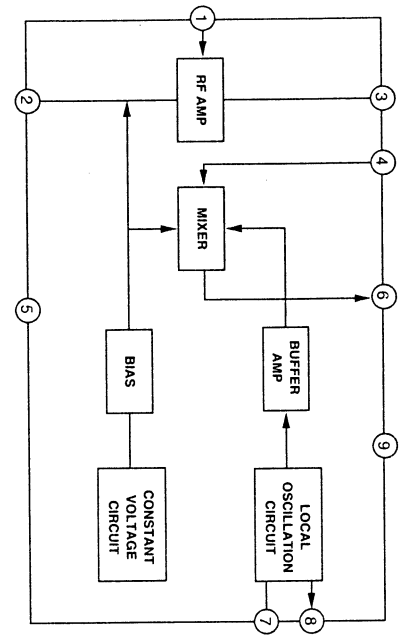
IC206 NKM2100D



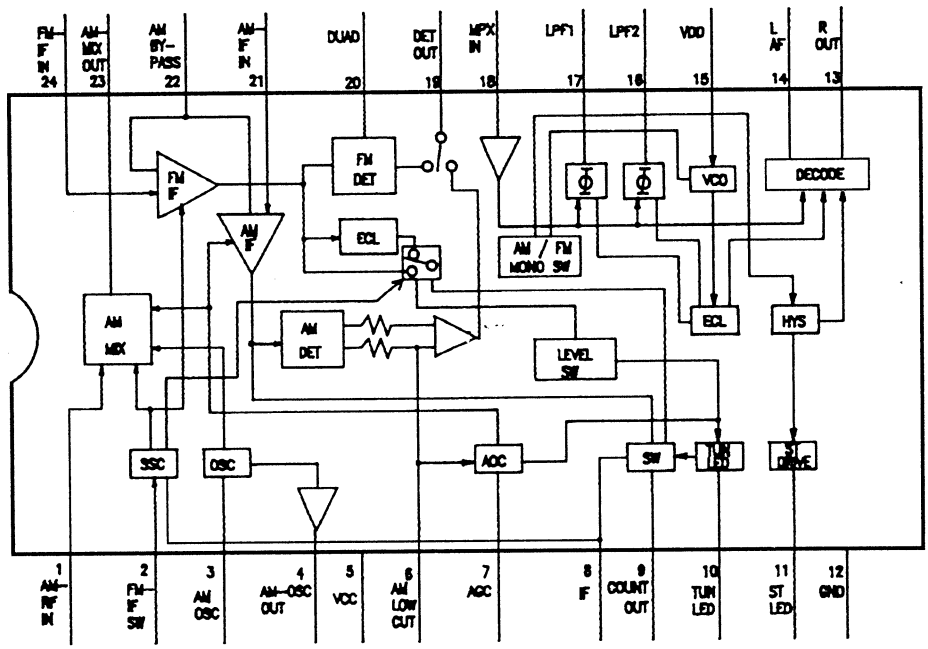
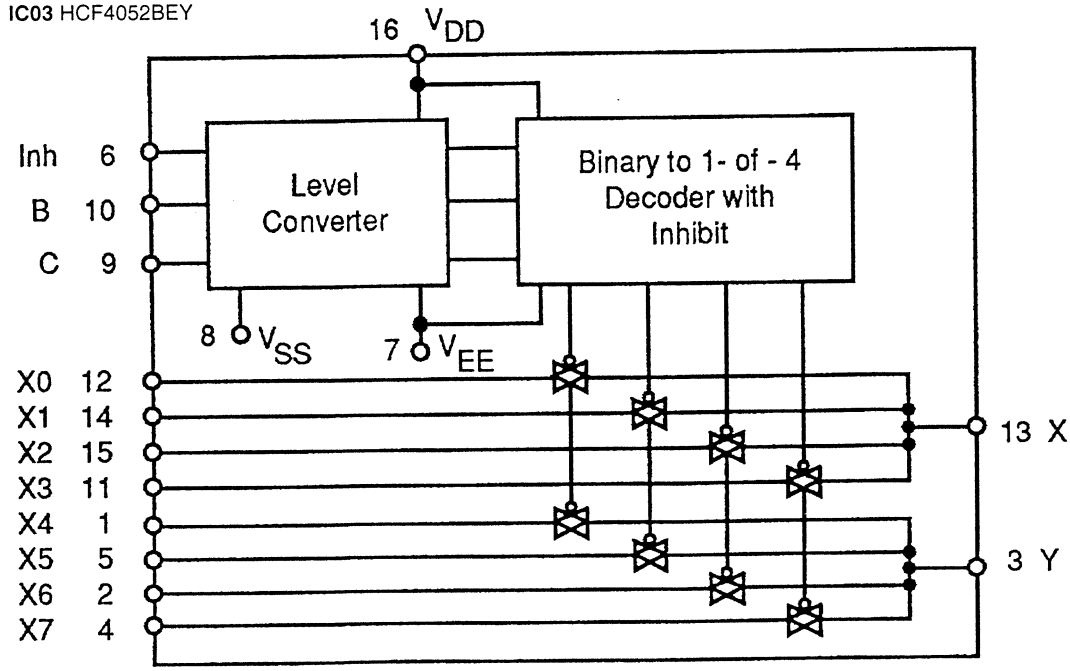
IC05 NJM2073D



IC00 TA7358AP



IC01 TA8132AN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